

## RETROFIT GREENHOUSE FILM

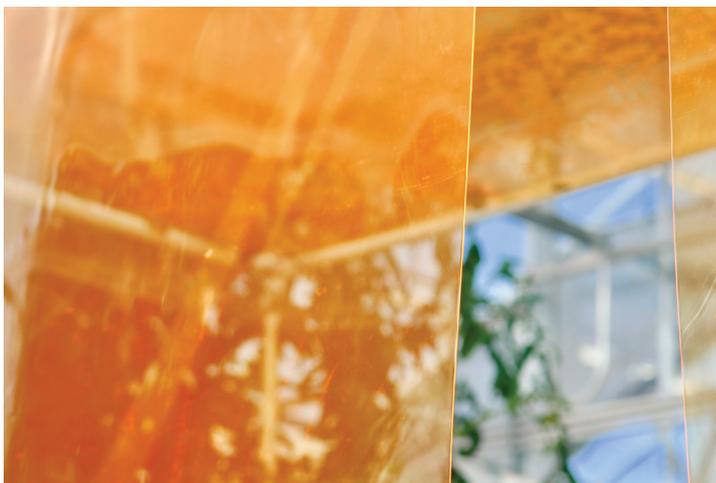
UbiGro is a line of luminescent greenhouse films that hang inside greenhouses. The film modifies the sun's spectrum to improve light quality for your crops.

The retrofit film uses quantum dots to absorb some of the UV and blue portions of sunlight and emit an orange glow on the plants.

The improved light quality promotes efficient plant growth and faster grow cycles, allowing you to harvest more crops per year.

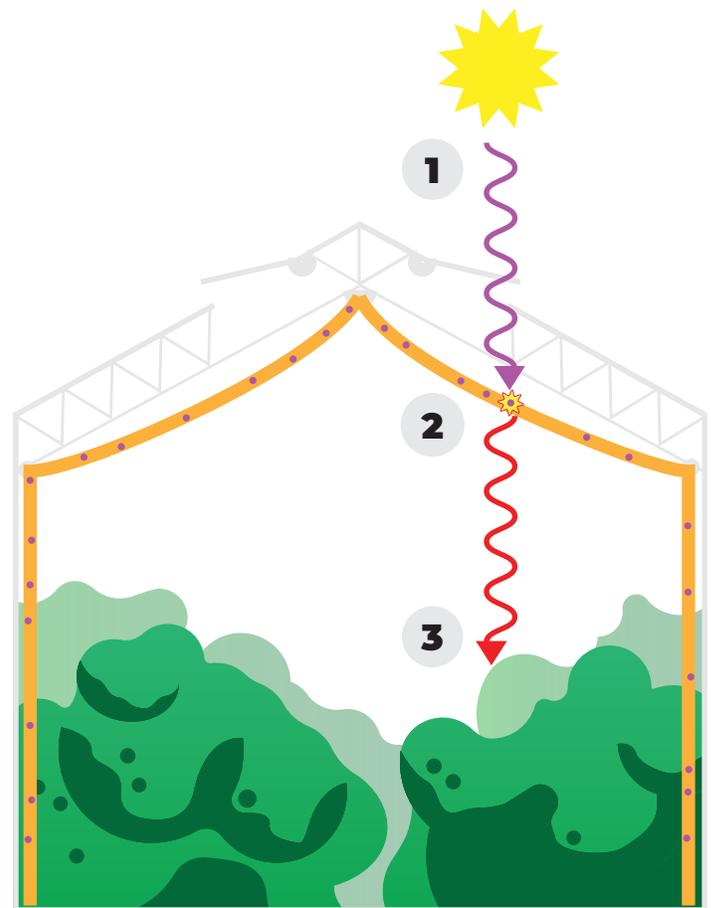
## HOW IT WORKS

- 1** Light from the sun is absorbed by quantum dots in the UbiGro film
- 2** Quantum dots shift the UV and blue photons towards the red
- 3** The modified light is absorbed by the crops, improving the plants' grow cycle and production rate



## SPECIFICATIONS

Emission Wavelength	600 nm ± 10nm
Full Width Half Max	110 nm ± 20nm
Conversion Efficiency	89% ± 5%
PAR Transmission	84% ± 5%
Haze	2.4% ± 0.5%
QD Composition	CuInS <sub>2</sub> /ZnS
Film Thickness	325 μm
Film Width	50 inches

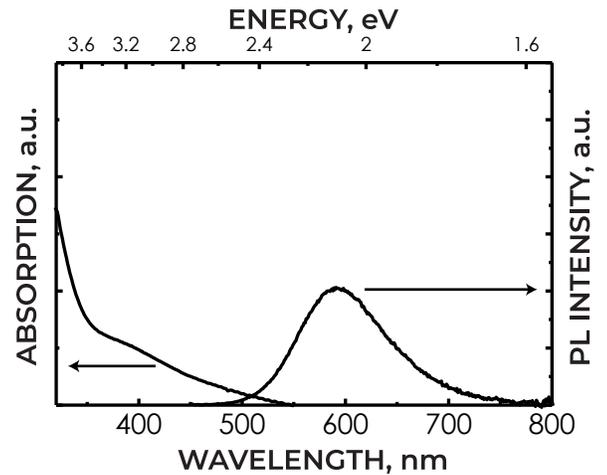


**SPECTRAL CHANGES**

Quantum dots have the unique ability to absorb one spectrum of light and efficiently convert it to another.

Quantum dots partially absorb high energy photons (UV and blue light) and convert them to orange or red light. The emission of the quantum dots can be tuned to provide a unique light recipe for your crops.

UbiGro film uses quantum dots that emit a glow at 600nm (orange), which has shown the best crop yield improvements over a variety of crops such as tomatoes, cucumbers and cannabis.



**UNIFORM LIGHT DISTRIBUTION**

UbiGro greenhouse film is a spectrally diffusive film which creates a uniform light distribution on your plants.

This allows for better light penetration into the plant canopy and better absorption of light by the plants.

**EASY INSTALLATION**

UbiGro film comes with grommets preinstalled every 2ft on the border of the film. The film can then be easily attached to the greenhouse structure with cable ties or other fastening devices.

